

CMI233[®]

Hand held coating thickness gauge with the diversity of bench top instruments

The **CMI233** gauge combines state of the art electronics and software with a compact, rugged design, suited for some of the most hostile work environments

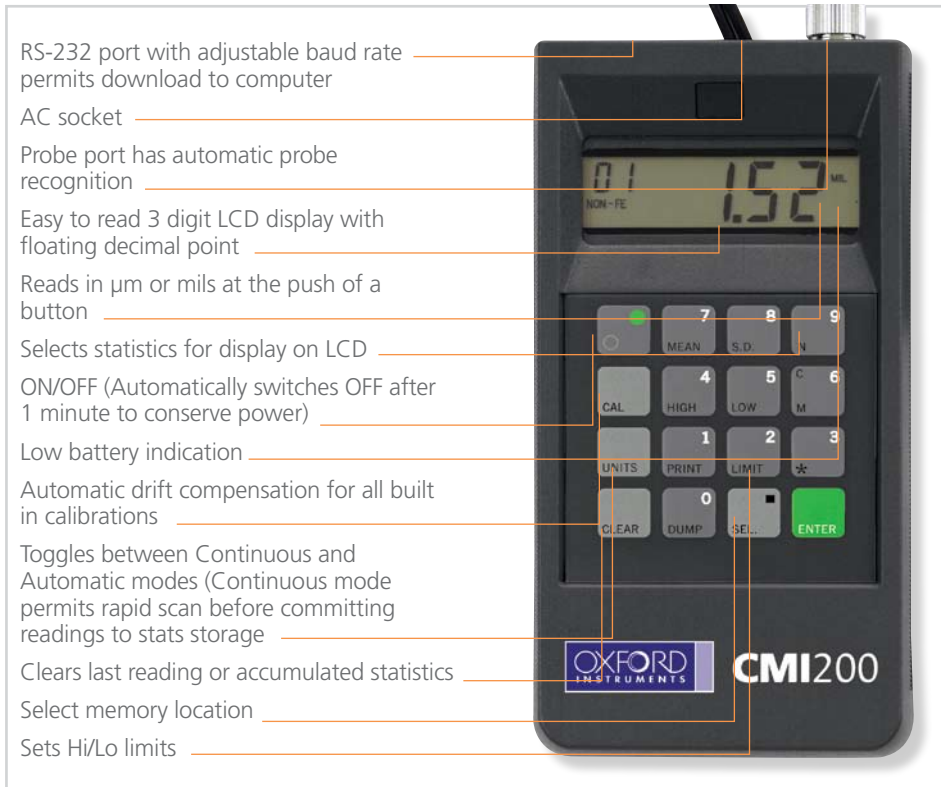


The **CMI233** gauge provides a reliable means for performing accurate, efficient inspection of coating/plating thickness at the lowest cost. Measurements can be taken in automatic or continuous modes. A scanning option compensates for uneven or textured substrate materials, enhancing performance of gauge repeatability and reproducibility. A large memory capacity for over 12,000 readings can accommodate even high usage applications.

Oxford Instruments offers a worldwide network of support and service. Like all our instruments, the **CMI233** is backed by our guarantee of superior service before and after you order.



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RS-232 port with adjustable baud rate permits download to computer

AC socket

Probe port has automatic probe recognition

Easy to read 3 digit LCD display with floating decimal point

Reads in μm or mils at the push of a button

Selects statistics for display on LCD

ON/OFF (Automatically switches OFF after 1 minute to conserve power)

Low battery indication

Automatic drift compensation for all built in calibrations

Toggles between Continuous and Automatic modes (Continuous mode permits rapid scan before committing readings to stats storage)

Clears last reading or accumulated statistics

Select memory location

Sets Hi/Lo limits

Probe Selector Chart

Probe Type	Probe Shape	Probe Mode	Min. Radius Convex Cylinder	Min. Radius Concave Cylinder	Working Height	Min. Measurement Area	Min. ID Rt. Angle	Min. base Thickness(mils)
Eddy Current	Straight	ECP	500" (11.2mm)	440" (11.2mm)	4.0" (102mm)	.360" (9.2mm)	N/A	12 (0.3mm)
Eddy Current	Right Angle	REP-3	N/A	N/A	N/A	.360" (9.2mm)	.575" (14.6mm)	12 (0.3mm)
Magnetic	Straight	SMP-2	.060" (1.6mm)	250" (6.4mm)	4.25" (108mm)	.375" (9.6mm)	N/A	12 (0.3mm)
Magnetic	Right Angle	RSPM-2	N/A	N/A	N/A	.375" (9.6mm)	800" (20.4mm)	12 (0.3mm)

Specifications:

Measurement methods:

Magnetic Induction: Conforms to method ASTM B499 & B530, DIN 50981, ISO 2178 and BS 5411 Parts 9 & 11

Eddy Current: Conforms to methods ASTM B244 & B259, DIN 50984, ISO 2360 and BS 5411 Part 3

Accuracy: +/- (1% + 0.1 μm) relative to reference standards

Measurement Ranges: Magnetic: 0 - 120 mils (0 - 3.01 mm), Eddy Current: 0 - 60 mils (0 - 1.52 mm)

Resolution: 0.01 mils (0.25 μm)

Memory Capacity: 12,400 stored readings

Min. ferrous and non-ferrous substrate thickness: 12 mils (305 μm)

Dimensions: 5 7/8" (L) x 3 1/8" (W) x 1 3/16" (D) (14.9 x 7.94 x 3.02 cm)

Weight: 9 oz (0.26 kg) including battery

Units: Automatic conversion between imperial and metric with a keystroke

Battery: 9V dry or rechargeable

Battery Life: Continuous Hours - 9V Dry: 50 Ferrous, 45 Non-Ferrous, Rechargeable: 11 Ferrous, 10 Non-Ferrous

Statistical Package: Optional CMI SmartStats provides a full statistical program and a report writer (SmartDocs)

Statistical Display: Number of readings, mean, standard deviation, high and low reading, Histogram and Cpk available with printer or serial output

Interface: RS-232 Serial port output with adjustable baud rate, for a printer or PC download

Printer: Optional 40 column thermal printer

Display: Three digit LCD display, 1/2" (1.27cm) character height

Keypad: Sealed membrane. Enhanced units - 16 keys

Scanning feature: Automatically average readings over a designated scan time (or can supply actual date hi-lo values)

- Measure etched traces as thin as 204 μm (8mils) without line width standards
- Store 9,690 measurements (with optional date and time stamp)
- Custom calibrated for your application using Oxford Instruments certified reference materials
- Customizable for other applications
- Static or continuous mode measurement
- Powered by regular AA batteries

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Over matter

